ABSTRACT OF THE DISCLOSURE

Data streams each having different data transmission rates are inserted into data frames each having the same data volume and the same data transmission rate. The data frames each have six subframes. A first and second stuffing check bit are arranged at the start of each of the second to sixth subframes. A first and second variable stuffing bit are arranged in the sixth subframe, following the first and second stuffing check bit. The data frames each have a data volume of 1360 bits. A transparent transmission of data streams or data signals having any desired data transmission rates is advantageously carried out over a transmission channel, optimum utilization of the transmission capacity of the transmission channel being achieved.

In the claims:

On page 12, cancel line 1 and substitute the following left-hand justified heading therefor:

15 CLAIMS

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Please cancel claims 1-8, without prejudice, and substitute the following claims therefor:

- 9. A method for transferring data streams of different transmission rates between a first and a second data transmission unit, the method comprising the steps of:
- inserting the data streams to be transferred into data frames, each data frame having a same data volume and a same data transmission rate;

providing that the data frames each have six sub-frames; arranging a first and a second stuffing check bit at a start of each of

25 the second to sixth sub-frames;

arranging a first and a second variable stuffing bit in the sixth subframe, the first and second variable stuffing bits respectively following the first and second stuffing check bits; and providing that the data frames each have a data volume of 1360 bits.

10. A method for transferring data streams of different transmission rates between a first and a second data transmission unit as claimed in Claim 9, the method further comprising the step of:

combining and inserting into the same data frames a plurality of data streams each having the same data transmission rate.

11. A method for transferring data streams of different transmission rates between a first and a second data transmission unit as claimed in Claim 9, the method further comprising the step of:

multiplexing a plurality of formed data frames to form a multiplex signal.

12. A method for transferring data streams of different transmission rates between a first and a second data transmission unit as claimed in Claim 11, the method further comprising the step of:

adding frame-detection and overhead information to the multiplex signal.

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13. A method for transferring data streams of different transmission rates between a first and a second data transmission unit as claimed in Claim 9, wherein the data transmission rates of the data streams are approximately 2.666057 Gbps, 2.488320 Gbps, and 1.250 Gbps.

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14. A method for transferring data streams of different transmission rates between a first and a second data transmission unit as claimed in Claim 13, the method further comprising the steps of:

transferring 225 data bits of the 2.666057 Gbps data signal as user data in the first to fifth sub-frames of a data frame; and

transferring 223 data bits of the 2.666057 Gbps data signal as user data in the sixth sub-frame of the data frame.

10 15. A method for transferring data streams of different transmission rates between a first and a second transmission unit as claimed in Claim 13, the method further comprising the steps of:

alternately transferring, in each of the first to fifth sub-frames of a data frame, 15 times 14 data bits of the 2.488320 Gbps data signal as user data followed by a fixed stuffing bit;

transferring 12 data bits of the 2.488320 Gbps data signal as user data followed by a fixed stuffing bit; and

alternately transferring, in the sixth sub-frame of the data frame, 14 times 14 data bits of the 2.488320 Gbps data signal as user data followed by a fixed stuffing bit.